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Special Edition

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POLICE AVIATION

CONFERENCES

Sweden and Holland

EMERGENCY SERVICES

EXHIBITION

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PACE CONFERENCE 2007

Sweden October 10-11.

The Annual PACE (Police Air Support Units Networking Centre Europe) conference took place in Stockholm, Sweden on October 10-11. This year the conference was hosted by the Swedish National Police Air Support Unit at the National Police Headquarters, Stockholm. Delegates from 12 European Countries attended the conference entitled Protecting Air Crews from Ground Hostilities.

The conference was opened by Commissioner Therese Mattsson of The Swedish National Investigating Police and Edo van den Brink President PACE Netherlands Air Support Unit.

Workshops were arranged to discuss the danger posed to aircrews from ground fire (long and small firearms), lasers and high intensity lights. The workshops focused on the responsibilities of, Management, Pilots, and Observers in managing threats from the ground and on protective measures that can be taken to safeguard air crews.

A number of very interesting presentations were made to attending delegates by Thomas Jarlinge, Patria Helicopters, Swedish Air Support Unit's maintenance provider, Luc Stremerch and Bert Troonbeeckx, Belgian Air Support Unit, Edo van den Brink Netherlands Air Support Unit and Hakan Gerharsen Norwegian Air Support Unit in Conjunction with Jon Andre Garberg, Jag Defence Group AS, Internet Distributed Downlink. This involved a demonstration of the Norwegian Air Supports helicopter operating over Oslo and transmitting live downlink pictures, over the internet to the conference room in Stockholm.

Elections for the post of President and Secretary which are held every two years saw the re-election of Edo van den Brink Netherlands Air Support Unit as President and Miha Avbelj Slovenian Air Support Units as secretary. The re-election of both committed PACE members, brings stability to the organisation and the knowledge that their hard work in support of the organisation will continue for another two years.

Of course no conference would be complete without a visit to the hosting countries Air Support Units base. In true style our hosts treated everyone to a wonderful sight seeing boat trip around the many islands that made up the City of Stockholm, before giving a conducted tour of their facilities located on one of the outer islands. This was followed by the conference dinner at the Unit's base sponsored by Patria Helicopters.

Once again the conference was considered a great success and delegates are already looking forward to next year's conference, the 10th, at a venue to be decided.

Donal Doyle Vice President PACE



POLICE AVIATION CONFERENCE

The Hague, Netherlands November 7-8.

The 2007 Shephard Conferences organised Police Aviation Conference in The Hague proved to be an excellent forum for the world's air operations practitioners.

The event was nominally hosted by the Dutch KLPD air unit but with members of the unit still locked in the final negotiations for a new air fleet to finally replace the ageing BO105s their time was clearly at a premium. An announcement about a new fleet has been made subsequently.

Squeezing two days of fairly intensive conversation into the pages of PAN is clearly out of the question. Suffice to say that, wholly as intended, this was not a cosy meeting of staid presentations - this was a coming together of practitioners with their own occasionally conflicting views.

In the wake of a few words by the Chairman Gareth Davies and Gunter Carloff of the German Federal Police the first scheduled speaker was intended to be Giovanni Liguori of the Italian State Police. Unfortunately Giovanni died in a double fatal accident in Rome when a AB206 PS*91 crashed in October [see reports in PAN November and December]. Fortunately his colleagues were able to send an excellent alternative speaker, Dr Coriolano Conte, who spoke later in the day. More at <http://www.uppolizia.it/>

Much of the success of any conference is generated from the interaction between speakers and delegates outside the hall as well as within. As has been found in the past simply bringing together Australian, American and a wide mix of European police does not guarantee success and perhaps it is the bringing together the constants of a familiar Chairman and a small cadre of regular speakers that helps.

There is little doubt that the most warmly welcomed group at the well appointed Congress Centre venue were those that travelled furthest to attend. Three members of the Australian Federal Police were in town making their numbers on par with almost every other national group. Some speakers do not need groups and this year circumstances left but one American representing his nation. Attempts to mute the booming tones of one of New York's finest, Chief Pilot Ken Solosky, were only partially successful—certainly no-one missed a word of either of his presentations on police aviation in the USA!

Much of the good humoured banter generated in and outside the hall related to the inexorable approach of the UAV. Everyone was agreed that, industry aside, this spectre is still sufficiently distant to be largely discounted but here as everywhere it intruded into most conversations and finally became the object of humour. As is becoming increasingly clear in the





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day to day information gathering for PAN the subject simply will not just go away. There was evident hostility from the pilots to the newcomer – although most were agreed that the chances of such craft actually replacing air support as we know it were very slender. As has been proven recently the biggest danger appears to lie in potential air unit operators ‘making do’ with unmanned vehicles in the mistaken belief that a UAV can replace manned craft. They are aircraft but in reality those seeking to operate them are not of the current aviation fraternity.

Many apparently disassociated presentations were coloured by the UAV’s. With the humour regularly breaking into proceedings the Belgian Federal Police introduced their existing Cessna 172 fleet as their valid ‘manned UAV’ resource. They are written down in very old money they are a very low cost observation platform that only needs one pilot - and the unit has pilots. it seems likely that the proposed new technology UAV’s will be acquired at a significant ‘new money’ cost and may yet require two systems operators - pilots - that might be expected to incur whole tranche of new money training and recurrency costs. There were certainly few real UAV fans in the Congress Centre.



As already widely reported elsewhere in the media there are protocols in place that centre around seeing the realisation of some operational go ahead circa 2012 - nothing to do with the London UK Olympics, just a coincidence in dating. The surprise announcement in the hall related to an organisation calling itself the South Coast Partnership of regular police forces teamed up with other enforcement agencies to partner BAE Systems in operating the [High Endurance Rapid Technology Insertion [HERTI] UAV over the busy English Channel. The project will not go away and was again being presented to the emergency services industry at Stoneleigh Park a matter of





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weeks later – more of that later.

Although HERTI appears to be pretty much long term stuff it both marks a move by the police in Kent to obtain air support on the cheap and places a modest warning to the industry that UAV's will be among us sooner rather than later.

I again refer the reader to the Belgian opinion on what you can do with a single engine Cessna and add that if this 2012+ single engine UAV project is so worthy on security grounds why are Kent [the front door to the UK] still without their own air support in 2007. Even if it is a cheap and battered Cessna?

The fact that this project was officially launched to the world at the Police Aviation Conference in The Hague was acknowledged in a short article on the HERTI project in the Sunday Times early in December.

The star turn, most agreed, was Martin Inglott.

In many ways it was a hard won gamble to invite what was nominally an army unit to speak at a police event on a subject - Frontex - that was effectively an unknown area of law enforcement. In the event doing so brought to the forefront a hitherto unknown area of police operations.

Lt. Col Martin Cauchi Inglott, Armed Forces of Malta, to give him his official title is nominally a sailor. He is the Commanding Officer of the Maritime Squadron - Malta's hard pressed tiny naval presence in the vast Mediterranean Sea. He was able to tell the

audience first hand about recent operations in securing the southern borders of Europe against mass migration from Africa. The human cost - clearly illustrated by corpses in the sea - is one aspect; the very real terror threat is another. The stream of humanity is a perfect cover for entry into Europe's soft underbelly. To add to the problems of the tiny Maltese Islands, those that are rescued have to stay in the islands, severely straining the resources of a population of just 800,000.

The relatively small craft operated by the AFM and the unsuitable aircraft options they currently have make effective patrol of their assigned area – a large area of sea 100 miles south of the islands – difficult. Air patrol is the task of their highly effective BN-2 fleet but they have no twin-engine helicopters. Italy undertakes SAR patrols on the islands on their behalf using Agusta-Bell machines.

Only now are the USA and the EC recognising this shortfall in capability by fiscal support for



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the delivery of advanced new EC145/UH-72A Lakota helicopters to operate in a SAR role. In a deal yet to be finalised the new helicopters will be replacing the ageing single engine Sud Alouette III's obtained more than a decade ago from the Netherland's. www.afm.gov.mt/

The Editor of Police Aviation News acts as an advisor to Shephard Conferences in selecting the range of speakers for this event.

Next year the Police Aviation Conference will be held in Olympia, London from November 5-6, 2008 www.shephard.co.uk/police

More images of this years Police Aviation Conference can be found at: -



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The Emergency Services Show 2007

Stoneleigh Park, Coventry November 28-29

EDITORIAL

The Emergency Services Show held in the vast if somewhat remote farming industry 'home' at Stoneleigh Park in the Midlands has just completed its second showing. The event is a conference and exhibition.

In the UK there are no events that truly reflect a coming together of all of the emergency services together in one place and in fairness this show currently fails to achieve that ideal. The Emergency Services Show is operated by the Emergency Services Times, itself an out-crop of Fire Times, and naturally the result has a fire orientated core – and that still shows in the end product. That said this event is the first real attempt to cross a very real divide that exists between the various self governing emergency services. The resulting event clearly illustrates that the fire and ambulance services are currently far closer that either of them is with the police. That is very much despite the creditable attempts to remedy the situation by the organisers.

Whether the organisers will ever see their ultimate aim of a all embracing event only time will tell. If it ever happens it will take time. A lot of time.

The venue is very remote but the organisers have laid on links to the nearest public transport portals but inclement weather this year severely strained the rustic car parking facilities in use. Although exhibitors commented on low visitor numbers on day one – potentially the busiest day – it was clear that the numbers achieved were clearly straining the vehicular access facilities. From anecdotal evidence it seems clear that this year at least aviation related visitors were sparse. I did run into a former police air support member but he was there in relation to his new job with the Red Cross which effectively places him in roughly the same bracket as another former acquaintance encountered. He used to be in the local Essex branch of Trumpton [the fire service] and again he is now working in the health service.

The sum of the event are the attendees, if these leaned towards one section of the industry [and they did] it would inevitably further confirm an impression of imbalance.

The majority of exhibitors and exhibits relate to the fire sector, the next largest grouping is ambulance boosted by such as areas common to all in the first aid sector. Unfortunately the police presence this year was very low, with just a handful of forces being represented. The Metropolitan Police, one of the core sponsors, were there but promoting Family Liaison – not a primary operational sector. The presence of the National Association of Police Fleet Managers, the NPIA [National Police Improvement Agency] served to bolster the sector but in truth each was slanted towards vehicle testing.

Nonetheless, as the following report suggests, the exhibition offered up some examples of interest to the aviation sector. For the visitor it is, perhaps, one to consider next year if you do not have to travel too far.

Overall, if the logistic 'problems' of the chosen venue can be overcome this event shows promise for the future if industry can be persuaded to part with some of its hard earned resources to exhibit to a nominally larger audience.



DUBAI 2008 HELISHOW

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Bryn Elliott

THE SHOW VENUE AND CONFERENCE

The venue, the home to various agricultural organisations, is relatively secure thanks to its remoteness a feature which removes a need to put in place a strict filtering regime. The two external exhibit parks, one to the front and the other to the rear of the exhibition hall enjoy relatively open access. The interesting range of emergency vehicles and beached water craft lining the route to the front of the exhibition hall were public domain where the displays at the rear of the hall were accessed from within.



The two-day conference programme was held in a separate building – The Warwick Complex. Although it contained a number of police subjects none appeared to impinge on aviation.

UNMANNED PRESENCE

Regardless of existing air support attitudes the them Unmanned Air Vehicles [UAV's] are becoming an all encompassing presence in UK emergency services planning. Although there were no displays of other aircraft – barely a mention of air ambulances and only a sin-

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gle image of a police helicopter – there were three UAV exhibits, two of which were demonstrating, and one associated downlink exhibit from Domo.

The most newsworthy of the UAV projects is that South Coast Partnership project announced at the Shephard Police Aviation Conference in early November. BAE Systems were in the hall promoting a range of unmanned craft, land based, water borne and the HERTI. The aircraft is now claimed to be of interest to an ever growing range of potential operators including Essex, Kent and Merseyside Police, the Border and Immigration Agency, Marine and Fisheries Agency, Serious Organised Crime Agency (SOCA) and Her Majesty's Revenue and Customs (HMRC). Some agencies [particularly the latter pair] are naturally somewhat reticent about their involvement.

At this early stage Kent Police remain the most active participant but other members have been highlighted as showing interest and more may yet follow. Thus far the additional police forces said to have been expressing an interest include Greater Manchester Police and West Midlands Fire Service [who are of course respectively helicopter and fixed wing operators and a light UAV experimenter. What they have in common is that they are not closely linked to conventional police air support – in the main these potential users are hitherto ground operators, special tactical and covert teams. The Partnership also has interest and support from the Home Office/NPIA in the person of Ollie Dismore, the Home Office Aviation Advisor.

Although a version of the HERTI exists and it has demonstrated viable automatic flight capabilities and flown operationally with the military this project is all about bringing the craft to a civil environment and meeting [as yet unclear] civil aviation flight rules that will add to automatic flight an acceptable measure of 'Sense and Avoid' without upsetting the apple cart by rushing in and putting one of these craft through someone's front room window [and thereby damaging the aims and aspirations for all time]. So far the few identified instances of UAV craft going wrong have been damped down thanks largely to the lack of media interest – the only fatal incident known took place in Africa [Congo].

In the next year the need for the South Coast Partnership and the craft will be defined. This activity will lead to the finalisation of the design and the commencement of prototype construction during 2009. Throughout 2010 and 2011 the prototype will be tested and certified with a view to operations commencing in 2012 with a certified 'sense and avoid' system in place.



Caroline Dolman, BAE Systems explains the principles of HERTI to a visitor.

BAE Systems were promoting a variety of uninhabited craft at the show, in addition to the aircraft there was this Hero Scout and underwater craft—each designed to go where police officers should fear to tread.



QUAD PAIR

The position of the little quad rotor craft reported on recently is perhaps somewhat less precarious. On their side these two similar looking craft from different factories in Germany have light weight and that might make them a safer bet for operating in close proximity to people. Not that safe though, even 1 kg [2.2. pounds] of deadweight falling from the sky can have fatal consequences.

It is noteworthy that while both of these craft were operating above the heads of the visiting crowds at the recent Milipol Show in Paris the stricter Health and Safety environment at Stoneleigh Park largely kept the craft on the ground. In fairness their flight aspirations were not helped by the wind. The gusting at about 15 mph represents the upper limit these craft can sensibly work in.

These craft do not autorotate as do conventional helicopters. If the engine stops or the transmission fouls up in some way they will quickly turn into flying bricks. That may be why the Microdrone craft has recently started offering add on rotor blade protection kit that emulates the complete ring its rival Air Robot offers as standard. Although easy to control, as an air vehicle these are not exactly precision fliers even in still air. When working in confined areas [perhaps searching a basement] the flight plan includes an assumption that there will be some 'bouncing' off the walls and that inevitably places the rotors at risk of fouling and the craft crashing out.

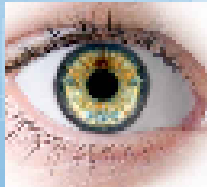


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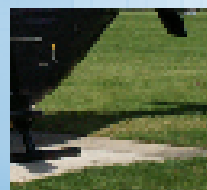
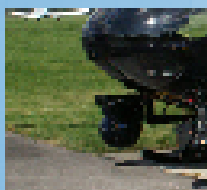
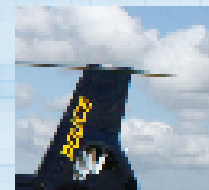
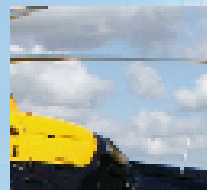
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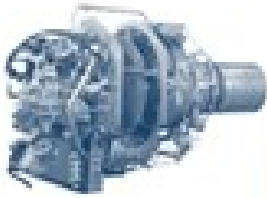
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Unlike Milipol flights over the visitors were strictly controlled. To the left is the West Midlands Fire Brigade craft waiting to fly and above is the minimalist control centre currently required to operate these small craft.

The Microdrone [represented in the UK by MW Power Systems Ltd] was being shown with both Domo (New All-digital encrypted downlink on C-band) and Thermoteknix (New hi-res Thermal Image camera), a combination that is to be repeated at the ISNR event in Olympia in early December. In addition on-site flights were being demonstrated by

Pat Mika of the West Midlands Fire Service subject to the vagaries of the weather. MW expect to receive confirmation of an order from South Wales Fire & Rescue Service for one of the craft imminently. Like West Midlands, South Wales will be using the craft under strict rules designed to ensure that the progress of the technology is not in any way harmed. To date West Midlands has been able to demonstrate impressive results within the necessarily restricted flight programme. Flying at low level the small cameras can produce high quality video and still images. The latter can be a boon to such as ‘instant’ accident reconstruction without the need to programme in a photo-sortie by a high cost aircraft of the conventional air support facility. If conditions permit the UAV sortie can even be undertaken at low cost while the event is fresh. Current programmes are all about researching what is feasible for the future. In the event the dream plans to have a number of these craft available in the back of a vehicles may not be practical and much of it will relate to operator qualifications. If maintained in their current form the existing plans in the USA requiring trained pilots for all such craft would not enable the quad rotor operations being undertaken in the UK to work at all. Merseyside are nearing the end of their evaluation period of two units. The first has been



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used in an entirely Overt manner with a highly visible deployment offering up a deterrent effect targeting anti-social behaviour, and by Traffic for general incident overview. A second unit has been deployed in a more covert manner – where a number of objectives have been successfully completed.

As previously reported in PAN West Midlands Police Operation Skywatch culminated in a demonstration of the abilities of the Microdrone, focusing the message against Street Robbery. This has led to a number of other applications being considered including: events policing and flexible CCTV deployment for the City Centre, alongside Road Traffic and Fire-arms incident support.

Similarly the Staffordshire Police used the system at the V-festival for Staffordshire, Shropshire and Cheshire Police to cover crime hotspots and car parks whilst diligently avoiding over-flights of people.

The Air Robot is in service with the German Army [HEER] in some numbers and is catching the attention of a number of UK police forces. A number of forces, including Wiltshire and Essex, have already hosted demonstration days though not necessarily with the media profile recently afforded to the Microdrone.

Both the Air Robot and the Microdrone have a common lineage that leads to them looking very similar in their current forms. That original commonality is now diverging with Air Robot continuing to develop and perfect its original product and Microdrone looking to produce a larger variant, the MD4-1000 in early 2008. This will move flight speeds up to 25mph and loiter time up to 1hr.

To advance further into a performance envelope acceptable to the certification authorities awaits the step beyond automatic flight - Sense & Avoid. Until that is achieved current CAA guidelines will continue to insist that 'line-of-sight' and a strict flight ceiling is adhered to (450ft) for micro-UAV's in non-segregated airspace. All initial deployments of the new technology will be with the military from next year so significant moves in the civil field will take a while.

EXHIBITION HALL

The exhibition offered a number of exhibitors with product lines of clear interest to all the emergency services including a range of uniform and insignia providers, such as SP Services first aid equipment, Peli for a range of containers, Fujifilm for camera and media supplies and no end of software houses to provide the images for senior ranks to huddle over before sending the few remaining front line resources to do the job.

Peli Products were exhibiting their range of containers, flashlights, lanterns and their recently introduced watertight, crush-proof storage system for EMS professionals to protect, store and organise medical gear while transporting it safely.

Peli EMS Kits fit the mid range Peli cases; 1500, 1550 and 1600 sizes. They are priced at £186.16 for the 1500 case and kit, £247.76 for the 1550 version and £293.96 for the 1600 case with EMS kit (prices exclude VAT).





Helmets Integrated Systems one of the UK's premier manufacturers of helmets and in particular the world renowned Alpha aviation helmet has a strong presence in providing high quality helmet solutions across the emergency services sector. Beyond the flight helmets are designs for riot control, special forces, lifeboat, fire and ambulance. As such it was one of the few truly whole industry exhibitors in the exhibit hall.

About the organisers products.

Fire Times is a paid for conventional bi-monthly magazine that costs in the region of £10 per issue. Emergency Services Times is published for times a year and costs around £25 per copy. As with most professional media these are sent out to selected recipients without charge.



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